use of these drugs increases by 18.0%, Fluoxetine is responsible for the growth of 88.5 % in this incidence, with a confidence interval of 95 % and standard error of 2%. **CONCLUSIONS:** It was identified that the main molecule used for depression, in the sample analyzed, was fluoxetine and the age with higher incidence of purchases of these drugs is between 20 and 50 years. As WHO data (World Health Organization), depression will be the most common disease in the world in 2030. The relationship between doctor and patient has a fundamental importance in successful treatment. Thus, the patient monitoring is extremely important to control the disease in the country.

PMH51

INTEGRATED CLINICAL PATHWAY IN SCHIZOPHRENIA

Colombo GL[1], Valentino MC[2], Di Matteo S[2], Bruno GM[2]
[1]*University of Pavia, Milan, Italy,* [2]*S.A.V.E. Studi - Health Economics & Outcomes Research, Milan, Italy*

OBJECTIVES: mental disorders are a significant problem of public health, especially for disability they generate during adulthood. They strongly influence quality of life for patients as well as having important impacts on society and mental health services, creating a significant economic problem for the health system and for patient. **METHODS:** an integrated clinical pathway (PDTA) for patient with schizophrenia has been validated by a group of Italian medical experts. This clinical governance tool, enables to organize and integrate activities and interventions in a context where, several specialties, professions and areas of action (hospital and territorial care) are involved. **RESULTS:** drug acquisition costs are not the highest costs in the schizophrenia management. The highest costs are related to: frequent hospitalization, residential care costs, loss of individuals productivity, high costs for caregiver. The aim of our work is to offer, to the different actors involved in the schizophrenia treatment management, a governance tool (PDTA) that allow: to manage the treatment variability, to monitor the resource utilization, to monitor the adherence and to improve the quality of processes and outcomes. Also the schizophrenia PDTA, promoting the early use of antipsychotics LAI, answer to the main unmet needs in the pathology management: the frequent relapses, the functional status preservation and the maintenance of good quality of life. An indicators set was validated to monitor the correct adoption of PDTA in order to generate savings and better manage the cost of disease. **CONCLUSIONS:** thanks to integrated clinical pathway all the actors involved in treating mental disorders are able to outline, the best clinical pathway practicable, compared to schizophrenia, in order to optimize resources and costs. A desirable perspective is the adoption of the clinical pathway at the regional level and in the future also at the national level.

SENSORY SYSTEMS DISORDERS – Clinical Outcomes Studies

PSS1

A PROSPECTIVE STUDY TO COMPARE SAFETY AND EFFICACY OF VARIOUS ANTI-GLAUCOMA AGENTS AND EVALUATE THE EFFECT OF AEROBIC EXERCISE ON INTRA-OCULAR PRESSURE IN NEWLY DIAGNOSED PRIMARY OPEN ANGLE GLAUCOMA PATIENTS IN A TERTIARY CARE HOSPITAL

Agrawal A
Muhs,Nashik, Kalyan,Mumbai, India

OBJECTIVES: To evaluate safety and efficacy of Timolol and Brimolol (Brimonidine+Timolol) and study effect of aerobic exercise on intra ocular tension (IOT) in timolol treated patients. **METHODS:** A prospective study including 90 cases of newly diagnosed primary open angle glaucoma (POAG) from ophthalmology inpatients divided into 3 groups: 1-Timolol, 2-Timolol (Exercise) and 3-Brimolol.Each patient was administered with topical drugs followed up every 15th day. Efficacy of drugs were tested based on IOT measurement by Non-contact tonometer at an interval of 15 days and safety on the basis of ADR check list, fundoscopy and slit lamp examination with tear film break up time and tear gland secretion (schirmer test). In group 2, patients were advised to do 30 min exercise daily for 1 month. **RESULTS:** Mean reduction in IOT was statistically significant with values as 2.7, 5& 7.9 mmHg and 6, 9&11 mmHg in group 1, 2 and 3 at 15th and 30th day. Frequency of ADR in group 1, 2&3 was 36%, 30% &40% respectively with the most frequent ADR in group 1&2 as burning of eyes (50%) & in group 3 as dryness (22%).Effect of brimolol on schirmer test was significant with a mean difference of 4.33 mmHg. Frequency of patients missing ophthalmic doses were 60%, 48% &48% and drop out treatment rate was 9%,9%& 14% in group 1, 2& 3 respectively with monetary reason (most common).Most frequent cause of missing ophthalmic doses was ADR (30%) in group 1&2 and monetary reason (43%) in group 3(predominantly in lower class).GQR-15 score was 35, 29&30.5 in group 1, 2 &3. **CONCLUSIONS:** Brimolol provides superior IOT lowering to timolol but is less well tolerated.Exercise along with timolol provides superior IOT lowering effect to timolol alone & is better tolerated, has superior visual QOL with reduced frequency of missed ophthalmic doses.Brimolol substantially reduces tear gland secretion.

PSS2

RISK OF INCIDENT CHRONIC KIDNEY DISEASE AND END-STAGE RENAL DISEASE IN PATIENTS WITH PSORIASIS: A NATIONWIDE POPULATION-BASED COHORT STUDY

Chi C[1], Wang J[2], Chen Y[3], Wang S[4], Chen F[5], Tung T[6]
[1]*Chang Gung Memorial Hospital, Chiayi, Chiayi, Taiwan,* [2]*National Taiwan University, Taipei, Taiwan,* [3]*Taipei City Government, Taipei, Taiwan,* [4]*Far Eastern Memorial Hospital, New Taipei, Taiwan,* [5]*Fu Jen Catholic University, New Taipei, Taiwan,* [6]*Cheng Hsin General Hospital, Taipei, Taiwan*

OBJECTIVES: Psoriasis is a chronic inflammatory dermatosis that has been associated with various cardiovascular and metabolic comorbidities, including myocardial infarction, stroke, and diabetes mellitus. Recently, there are studies reporting the association of psoriasis with renal diseases. This study aimed to evaluate the risk of incident chronic kidney disease (CKD) and end-stage renal disease (ESRD) in people with psoriasis. **METHODS:** We used the Taiwan's National Health Insurance Research Database to conduct a nationwide population-based cohort study to assess the risk of incident CKD and ESRD in people with psoriasis and to further evaluate the respective risk estimates in those with mild and severe psoriasis based on treatment patterns. **RESULTS:** A total of 4,633 psoriatic patients and 922,534 nonpsoriatic controls were included. Severe psoriasis, but not mild psoriasis, was an independent risk factor of incident CKD and ESRD (adjusted hazard ratio being 1.90 (95% confidence interval 1.33-2.70) and 2.97 (95% confidence interval 1.72-5.11), respectively) after adjustment for potential confounders including age, gender, comorbidities, and used of nonsteroidal anti-inflammatory drugs (NSAIDs). Severe psoriasis remained an independent risk factor of incident CKD and ESRD after various sensitivity analyses after adjusting for the presence of osteoarthritis and/or rheumatoid arthritis, use of methotrexate and/or cyclosporine, and chronic use of NSAIDs for at least 2 months. Psoriatic arthritis was an effect modifier for CKD and ESRD. **CONCLUSIONS:** The associations of severe psoriasis with CKD and ESRD should be recognized. Assessment of renal function and avoidance of long-term use of nephrotoxic drugs shall be implemented in the integrative care for patients with severe psoriasis.

PSS3

BURDEN OF DISEASE IN PATIENTS WITH GLAUCOMA IN BRAZIL:

Ferreira CN[1], Sanders KN[2], Clark OA[3], Pomerantz D[4], Chapnick J[4], Hatanaka M[5]
[1]*Pfizer, São Paulo, Brazil,* [2]*Pfizer, Inc., New York, NY, USA,* [3]*Evidencias - Kantar Health, Campinas, Brazil,* [4]*Kantar Health, Horsham, PA, USA,* [5]*University of Sao Paulo School of Medicine, Sao Paulo, Brazil, Sao Paulo, Brazil*

OBJECTIVES: To assess co-morbidity, quality of life (QOL), work/productivity loss, and medical resource utilization (MRU) in patients suffering from glaucoma in Brazil. **METHODS:** Patients self-reported data were collected from 2011-2012 National Health and Wellness Survey (NHWS -Kantar Health global self-reported general population survey in healthcare). QOL was measured by the physical component score (PCS) and mental component core (MCS)of the Short Form-12 (SF-12) (mean score of 50 for general population). Loss of work/productivity was measured by the validated Work Productivity and Activity Impairment (WPAI) instrument. MRU was measured by healthcare provider, emergency room (ER) visits and hospitalization in the past 6 months.Comparisons were made between respondents who were diagnosed with glaucoma vs. respondents without glaucoma (non-glaucoma group). Since glaucoma typically affects the adult population, respondents with an age of 35 and above were included in the analysis. **RESULTS:** Among 24,000 survey respondents, 242 (1.0%)respondents were diagnosed with glaucoma. The average age in the glaucoma group was 53.5 years and 48.2% were male compared to the non-glaucoma group where average age was 51.6 years with 47.8% male. The Glaucoma group reported more co-morbidities, lower mean PCS scores (46.3 vs. 49.4) and MCS scores (45.6 vs. 49.0), more healthcare providers visits (93.7%vs.77.4%), ER visits (29.6%vs19.0%) and hospitalizations (17.5%vs.9.7%) in the past 6 months compared to non-glaucoma group. Also, the glaucoma group reported 36.5% work/productivity loss (absenteeism and presenteeism) and 33.5% impairments in daily activity compared to 17.5% and 22.1% in non-glaucoma group. All comparisons in QOL, MRU, and work/productivity loss between two groups were statistically significant at $P<0.05$. **CONCLUSIONS:** From the Brazil NHWS results, glaucoma patients suffer from impairments in quality of life, work/productivity loss,more co-morbidities and use of medical services. Findings indicate that glaucoma can have a statistical significant impact and negative impact on QOL, MRU and work productivity for patients suffering from the disease and for the healthcare system.

PSS4

EFFICACY AND SAFETY OF SURGICAL TREATMENT OPTIONS FOR PRIMARY ANGLE CLOSURE GLAUCOMA: A META-ANALYSIS OF RANDOMISED CONTROLLED TRIALS

Verma J[1], John D[2], Nair SR[1], Oomman S[1], Mishra R[1], Shah P[1], Jha D[2], Shaikh S[1]
[1]*Capita Ind Pvt. Ltd., Mumbai, India,* [2]*Capita India Pvt. Ltd., Mumbai, India*

OBJECTIVES: Worldwide, glaucoma is the second highest cause of blindness. Surgery is the treatment of choice when medications fail to control intraocular pressure (IOP). This systematic literature review and meta-analysis aimed to compare efficacy and safety of the common surgical options available for primary angle closure glaucoma (PACG). **METHODS:** Studies with PACG patients who underwent trabeculectomy, phacotrabeculectomy or phacoemulsification were screened and included from electronic databases. The outcomes compared were IOP (24 months), postoperative angle opening distance (AOD), postoperative trabecular-ciliary process distance, postoperative anterior chamber depth (ACD), synechial angle closure all at 1 year, best corrected visual acuity (BCVA) at 1 year and 2 years, and intra- and post-operative complications of the surgery like worse logarithmic minimal angle resolution BCVA, progression of glaucomatous optic neuropathy, progression of glaucomatous visual field at 2 years. Critical appraisal of studies was carried out using Cochrane's Risk of Bias tool. Meta-analysis of clinical trials was conducted using RevMan v5.1, through pooling of medically controlled and uncontrolled glaucoma patients where available. **RESULTS:** Of the 704 studies that were screened, five randomised clinical trials were included. Pooled analysis of two studies showed IOP at 24 months was better controlled by phacotrabeculectomy (mean difference 1.46 [95%CI 0.24,2.67]). Post-operative AOD and ACD results favoured phacoemulsification (mean difference 123.60 [95%CI 51.46,195.74] and 230.60 [95%CI 106.30,354.90] respectively). The post-operative complications showed risk ratio of 0.07 (95%CI 0.01,0.34) showing fewer complications in phacoemulsification patients. The remaining outcomes showed no significant results. Phacoemulsification had significantly lesser complications than trabeculectomy, with risk ratio of 0.08 (95%CI 0.01,0.60). The analyses of the observational and economic studies are being carried out, the results of which will be included in the poster. **CONCLUSIONS:** The results show that while phacotrabeculectomy has better IOP control than phacoemulsification, the latter has higher safety than both phacotrabeculectomy and trabeculectomy.

PSS5

SKIN WHITENING MULTIPLE EMULSIONS LOADED WITH GREEN TEA AND LOTUS EXTRACTS: AN EFFICACY STUDY

Mahmood T[1], Akhtar N[2]
[1]University of Central Punjab, Lahore, Pakistan, [2]The Islamia University of Bahawalpur, Bahawalpur, Pakistan

OBJECTIVES: Currently, there is no study reporting synergistic skin whitening potential of green tea and lotus in healthy humans. The aim of this study was to investigate the in-vitro anti tyrosinase activity of green tea and lotus extracts, consequently to determine the actual potential efficacy of the topical formulations in healthy humans in a 60 days treatment course. **METHODS:** Thirty three healthy human subjects were enrolled in an approved single-blind, placebo-controlled, split-face trial. Each group with eleven subjects applied green tea (GT), lotus (L) or green tea plus lotus (GT-L) multiple emulsions over 60 days treatment period. The subjects applied placebo treatment on one side of the face while active treatment on other half of the face and they were educated to apply the formulations once daily at bed time. Clinical objective evaluations were performed with a non-invasive biometrology probe at baseline, day 15, 30, 45 and day 60. **RESULTS:** Melanin index-MI measured for each treatment on different time intervals and it was statistically evident that combined treatment of green tea and lotus offered more benefit than single treatments ($P < 0.001$). **CONCLUSIONS:** It was concluded that green tea plus lotus could be explored further for the treatment of pigmentation disorders.

PSS6

OUTCOME OF HARKÁNY THERMAL WATER COMPLETED PUVA THERAPY VERSUS TRADITIONAL PUVA THERAPY OF PSORIATIC PATIENTS

Péter I[1], Laczó A[2], Jagicza A[1], Sebestyén A[3], Cs Horváth Z[4], Endrei D[5], Tánczos F[6], Molics B[5], Boncz I[5]
[1]Zsigmondy Vilmos SPA Hospital, Harkány, Hungary, [2]National Healthcare Service Center, Pécs, Hungary, [3]National Health Insurance Fund Administration, Pécs, Hungary, [4]Government Office of Baranya County, Pécs, Hungary, [5]University of Pécs, Pécs, Hungary, [6]Komló City Hospital, Komló, Hungary

OBJECTIVES: City of Harkány has a traditional and well recognized thermal water spa since early 19thcentury, the oldest one in Hungary. The aim of our study was to compare the effect of traditional PUVA therapy to the effect of PUVA therapy complemented with Harkány water therapy on psoriasis patients. **METHODS:** Patients with psoriasis were recruited with the help of dermathologists (February-November 2014). We identified two patient groups. The traditional PUVA treatment was conducted in the Hospital of Komló (N=25 patients, average age: 54.7 years), the PUVA treatment complemented with Harkány thermal water treatment was conducted in the Spa Hospital in Harkány (N=52 patients, average age: 57 years). The length of the treatment was 3 weeks. The efficacy of the treatment was assessed by Psoriasis Area Severity Index (PASI scores). **RESULTS:** Patients treated with traditional PUVA therapy had a starting PASI score of 10.1, while patients treated with PUVA complemented with Harkány water therapy had the starting PASI score of 8.2. After the three weeks long treatment patients treated with traditional PUVA treatment got a 50% better PASI score vs. the starting point. In the other group, where patiants were treated with PUVA complemented with Harkány water the PASI score showed an improvement bigger than 75%. The change is 5.2 points at the traditional and 6.2 points at the Harkány water treatment, and the derogation is significant ($p<0,005$), than in the control group. **CONCLUSIONS:** The PUVA therapy complemented with Harkány thermal water therapy resulted in an increased improvement in the patients' quality of life, based on the PASI scores. It is advisable to rethink the psoriasis therapy protocol, due to the increased improvement of the patients treated with Harkány thermal water.

PSS7

EFFICACY COMPARISON OF ANTI-VEGF AND LASER PHOTOCOAGULATION IN THE TREATMENT OF VISUAL IMPAIRMENT DUE TO DIABETIC MACULAR EDEMA: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

Regnier SA[1], Malcolm WA[2]
[1]Novartis Pharma, Basel, Switzerland, [2]Novartis UK, Frimley, UK

OBJECTIVES: Compare the efficacy of therapies in the treatment of visual impairment due to diabetic macular edema. **METHODS:** A systematic review was conducted to identify relevant randomized control trials (RCTs). RCTs reporting 6- or 12-month results for ranibizumab, aflibercept, laser or sham were included. The analysed outcomes were best-corrected visual acuity (BCVA) measured as the proportion of patients gaining at least 10 letters or 15 letters. Efficacy comparisons were made using a Bayesian network meta-analysis with random treatment effects adjusting for baseline BCVA. **RESULTS:** The analysis included 2634 patients from 10 RCTs (including DRCR-net Protocol T). For the percentage of patients who gained ≥10 letters, ranibizumab 0.5 mg pro re nata(PRN) was numerically superior to aflibercept (OR, 1.6; 95% credible interval [CrI], 0.6–5.4). The odds of gaining ≥ 15 letters were the same for ranibizumab 0.5 mg PRN and aflibercept 2q8 (OR, 1.0; 95% CrI, 0.3–5.9 for PRN). Similar findings were found for ranibizumab 0.5 mg treat and extent (T&E). The probability that ranibizumab 0.5 PRN was a better treatment than aflibercept was 84% for patients gaining ≥ 10 letters and 51% for patients gaining ≥ 15 letters. The odds-ratio of gaining ≥ 10 letters with ranibizumab 0.5 mg (PRN or T&E) vs. 0.3 mg PRN was 2.3 (95% CrI: 0.5-16.6) and 2.0 (95% CrI: 0.4-30.7) for ≥ 15 letters. The probability that ranibizumab 0.5 mg was superior to 0.3 mg PRN was 89% for patients gaining ≥ 10 letters and 82% for patients gaining ≥ 15 letters. **CONCLUSIONS:** Ranibizumab 0.5 mg patients had a higher probability of gaining ≥ 10 letters than aflibercept patients and had similar probabilities of gaining ≥ 15 letters as aflibercept. Ranibizumab 0.5 mg has a higher probability of being the best treatment than ranibizumab 0.3 mg PRN.

PSS8

SYSTEMATIC REVIEW AND MIXED TREATMENT COMPARISON OF THERAPIES FOR DIABETIC MACULAR EDEMA

Fortier K[1], Kiss N[2]
[1]Compass Strategic Consulting, Inc., New Haven, CT, USA, [2]Medical University of Vienna, Vienna, Austria

OBJECTIVES: The recent publication of the DRCR.net Protocol T study, sponsored by the National Institutes of Health (NIH), is the first head-to-head trial of ranibizumab (Lucentis, Genentech), aflibercept (Eylea, Regeneron), and bevacizumab (Avastin, Genentech). The lack of head-to-head data of the anti-vascular endothelial growth factor treatments of diabetic macular edema (DME) has led to a dependency on indirect comparisons of treatments for DME. To update the current literature, an indirect comparison of the effectiveness of all treatments for diabetic macular edema (DME) in the last 10 years was undertaken, and includes results from the Protocol T study. **METHODS:** A comprehensive search was conducted to identify relevant studies published in the last 10 years on MEDLINE, Embase, the Cochrane Library, and CINAHL. Selective studies were synthesized and assessed for quality. Studies with too few patients (less than 30) or with a quality score of 25% or lower were excluded. A random-effects model was used to pool effectiveness and to examine heterogeneity. **RESULTS:** At the time this abstract was published, the results were still being finalized. It is expected that the results will show a greater improvement in best-corrected visual acuity (BCVA) for patients treated with aflibercept compared to the other treatments, similar to previous meta-analyses. Unlike recent previous meta-analyses, this study will provide a comparative assessment of all other treatments for diabetic macular edema, including laser and steroids such as dexamethasone and triamcinolone. **CONCLUSIONS:** This study seeks to clarify and update the current literature with the results of an indirect comparison. Results and conclusions are forthcoming and will be presented at the ISPOR 18th Annual European Congress.

PSS9

HIGHER DRUG SURVIVAL RATES IN PATIENTS WITH PSORIASIS UTILIZING ETANERCEPT COMPARED TO ADALIMUMAB – A NATIONWIDE POPULATION-BASED COHORT STUDY IN SWEDEN

Berglund A[1], Ljungberg A[2], Dorange A[2]
[1]Biogen AB, Upplands Vasby, Sweden, [2]Pfizer AB, Sollentuna, Sweden

OBJECTIVES: Drug survival (time to drug discontinuation) can be interpreted as a composite measure of effectiveness, safety and tolerability. The aim of the present study was to compare the drug survival between adalimumab and etanercept in patients diagnosed with psoriasis (PsO) in Sweden. **METHODS:** Patients with PsO (ICD-10; L40.0, L40.4-L40.5, and L40.9) starting their first treatment of etanercept or adalimumab between 2009 and 2014 were identified in the publicly available Swedish Drug Prescribed Registry and record-linked to the Swedish National Patient Registry. Data were collected through 31 December 2014. Drug discontinuation was defined as if the patient did not pick upa prescription at the pharmacy for the same treatment within 90, 100 and 120 days after the end of the previous dispensing episode. Kaplan-Meier curves and Cox regression was used with adjustment for sex, calendar year and age at initiation. **RESULTS:** A total of 3,640 PsO patients were utilizing their first etanercept (48.3%) or adalimumab (51.7%) treatment between 2009 and 2014 in Sweden. There were statistically significant differences in calendar year ($p<0.001$) and age at initiation ($p=0.014$), but not for sex ($p=0.081$) between the two treatments. Drug survival was statistically significant higher for etanercept compared to adalimumab when using 90, 100 but not for 120 days as the definition for discontinuation. Following adjustment for calendar year, sex and age at initiation, the risk of discontinuation was lower in etanercept compared to adalimumab when using 90 and 100 days as the definition time (90 days; HR 0.83, 95% CI 0.76-0.92; 100 days HR 0.86; 95% CI 0.77-0.96; 120 days HR 0.92 95% CI 0.81-1.04). Also, increased age at initiation, calendar year, and male were all independent factors for a lower discontinuation rate. **CONCLUSIONS:** Drug survival rates were higher for etanercept compared with adalimumab among PsO patients in a nationwide real world setting in Sweden.

PSS10

HEALTHCARE PATHWAYS AND BURDEN OF DISEASE OF PATIENTS WITH SKIN AND SOFT TISSUE INFECTIONS (SSTIS)

Calabria S[1], Cinconze E[2], Martini N[3], Rossi E[2], Esposito I[3], De Rosa M[2]
[1]CORE, Collaborative Outcome Research, Bologna, Italy, [2]CINECA Interuniversity Consortium, Casalecchio di Reno, Italy, [3]Accademia Nazionale di Medicina, Roma, Italy

OBJECTIVES: SSTIs are an emerging cause of outpatient visits and hospitalizations, due to the dramatic rising of antimicrobial resistance and severity of the infection. This study aimed to analyze the healthcare profile of patients with SSTIs in the real clinical practice and to determine the total cost of the disease. **METHODS:** Starting from ARNO Observatory database (13 million citizens), a cohort of patients with SSTIs, with available, complete and good quality data on pharmaceutical prescriptions, diagnostic procedures and hospital discharges, was selected. The accrual period lasted from the January 1st to December 31st 2012. Every single patient was followed for 1 year, to identify events, healthcare services associated to SSTIs and their costs. A focus on Linezolid was made to evaluate the proper length of treatment, both in hospital (assuming hospitalization days equivalent to prescriptions) and in community care (pharmaceutical prescriptions). **RESULTS:** Of 2.216 patients with SSTIs (67% men, mostly aged ≤ 25), 1.771 (79,9%) received at least one drug prescription: "Beta-lactam antibacterials" the most prescribed (40%) and "Other antibiotics" the most expensive (1.340€), where Linezolid resulted the most used (106 patients). According to requirements, its therapy length is appropriate if it lasts 10 to 14 days (600mg twice daily). The outpatient oral cycle therapy lasted on average for 17,8 days and the IV formulation for 9,8 days, while hospitalization days were on average 7. Ordinary and daily hospitalizations were the most expensive healthcare services (on average 4.718€/patient). Linezolid widely contributes to pharmaceutical costs (622€/patient), both for IV and for oral formulation, respectively mean expenditure 914€ and 686€ during the one-year follow-up. **CONCLUSIONS:** The community use of Linezolid is bordering on authorized dosages and raises costs of patients with SSTIs. This must be considered by LHUs and Physicians when assessing healthcare profiles of SSTIs disease, estimating costs of illness and improving clinical governance.